

Contents

History

Phylogeny

See also

References

Description



Tiarajudens

~260 Ma

Pre€ € OS D C P T J K PgN

Scientific classification

Cisneros *et al.*, 2011

Binomial name

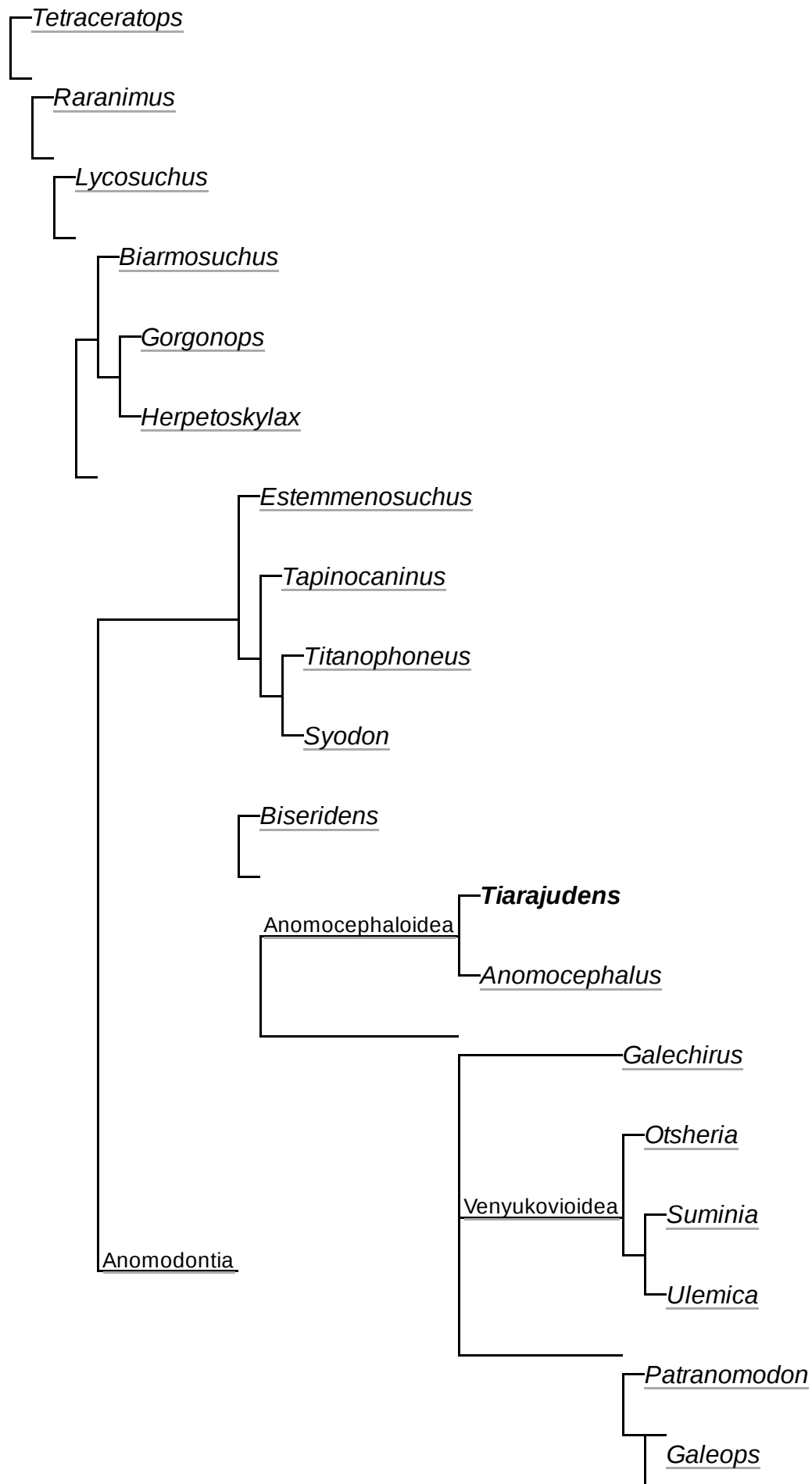
†*Tiarajudens eccentricus*Cisneros *et al.*, 2011

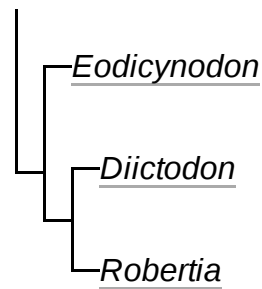
History

Phylogeny

Cladogram after Cisneros *et al.*, 2011:^[1]

Therapsida





Paleobiology

The saber-like teeth of *Tiarajudens* are unique among anomodonts, a group of entirely herbivorous therapsids. Although large canines are often found in carnivores, the surrounding teeth of *Tiarajudens* indicate that it was an herbivore. *Tiarajudens* is one of the earliest herbivores to possess saber-like canines; previously the oldest known saber-toothed herbivores were large extinct mammals such as *Titanoides*, which lived around 60 million years ago.^{[4][7]} The teeth are even larger than those of the carnivorous therapsid *Inostrancevia*, one of the largest members of *Gorgonopsia*, a group characterized by the presence of long canines.^[4] The large canines of *Tiarajudens* were likely used as a defense against predators or as a means of fighting for mates; living mammals such as the water deer and musk deer use their saber teeth for these purposes.^[4] The palatal teeth are broad and fit tightly together, an adaptation to consuming fibrous plants. This variation in tooth shape, known as a heterodont dentition, is common in mammals. While most other Permian therapsids had homodont dentitions (teeth of the same shape), *Tiarajudens* is one of the earliest therapsids to have a heterodont dentition.^[1]

See also

- List of synapsids
- Sepé Tiaraju

References

1. Cisneros, J.C.; Abdala, F.; Rubidge, B.S.; Dentzien-Dias, D.; Bueno, A.O. (2011). "Dental Occlusion in a 260-Million-Year-Old Therapsid with Saber Canines from the Permian of Brazil". *Science*. **331**: 1603–1605. doi:[10.1126/science.1200305](https://doi.org/10.1126/science.1200305) (<https://doi.org/10.1126%2Fscience.1200305>). PMID 21436452 (<https://pubmed.ncbi.nlm.nih.gov/21436452>).
2. NYTimes.com. "Fearsome Fangs, for a Plant-Eater." Bhandu. March 25, 2011. (<https://www.nytimes.com/2011/03/29/science/29obteeth.html>)
3. Fröbisch, J. (2011). "On Dental Occlusion and Saber Teeth". *Science*. **331**: 1525–1528. doi:[10.1126/science.1204206](https://doi.org/10.1126/science.1204206) (<https://doi.org/10.1126%2Fscience.1204206>).
4. Harmon, Katherine (25 March 2011). "What was a South American herbivore doing with saber teeth?" (<https://web.archive.org/web/20120826234339/http://blogs.scientificamerican.com/observations/2011/03/25/what-was-a-south-american-herbivore-doing-with-saber-teeth/>). *Observations*. Scientific American. Archived from the original (<http://www.scientificamerican.com/blog/post.cfm?id=what-was-a-south-american-herbivore-2011-03-25>) on August 26, 2012. Retrieved 25 March 2011.
5. Viegas, Jennifer (24 March 2011). "Saber-Toothed Vegetarian Had Threatening Mouthful" (<http://web.archive.org/web/20120318042057/http://news.discovery.com/animals/saber-tooth-animal-plant-eater-110324.html>). *Discovery News*. Archived from the original (<http://news.discovery.com/animals/saber-tooth-animal-plant-eater-110324.html>) on March 18, 2012. Retrieved 25 March 2011.

6. Choi, C.Q. (24 March 2011). "Odd Ancient Beast Was Saber-Toothed Vegetarian" (<http://www.livescience.com/13393-saber-toothed-vegetarian-beast-ancient-brazil.html>). *LiveScience*. Retrieved 25 March 2011.
7. Handwerk, B. (24 March 2011). "Odd Saber-Toothed Beast Discovered—Preyed on ... Plants?" (<http://news.nationalgeographic.com/news/2011/03/110324-saber-toothed-sabertooth-vegetarian-science-evolution-tiarajudens/>). *National Geographic Daily News*. Retrieved 24 March 2011.

Retrieved from "<https://en.wikipedia.org/w/index.php?title=Tiarajudens&oldid=930903486>"

This page was last edited on 15 December 2019, at 18:57 (UTC).

Text is available under the [Creative Commons Attribution-ShareAlike License](#); additional terms may apply. By using this site, you agree to the [Terms of Use](#) and [Privacy Policy](#). Wikipedia® is a registered trademark of the [Wikimedia Foundation, Inc.](#), a non-profit organization.